**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Andreas MICHL	Confirmation No.: 9387
Application No.: 10/567,474	Examiner: Lee, Jae Young
Filed: February 3, 2006	Group Art Unit: 2466

For: MESSAGE ANALYSER AND ANALYSIS METHOD

Commissioner for Patents
Alexandria, VA 22313-1450

<u>**APPEAL BRIEF**</u>

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated June 29, 2011.

I.   <u>REAL PARTY IN INTEREST</u>

Rohde & Schwarz GmbH & Co. KG is the real party in interest.

II.   <u>RELATED APPEALS AND INTERFERENCES</u>

Appellant is unaware of any related appeals and interferences.

III.   <u>STATUS OF THE CLAIMS</u>

Claims 1, 2, 4, 6 through 11, 13, and 15 through 21 are pending in this Application.

Claims 3, 5, 12, and 14 have been canceled, and claims 1, 2, 4, 6 through 11, 13, and 15 through

21 have been previously presented.

Claims 1, 2, 4, 6 through 11, 13, and 15 through 21 were finally rejected in an Office Action dated March 29, 2011. It is from the final rejection of claims 1, 2, 4, 6 through 11, 13, and 15 through 21 on March 29, 2011, that this Appeal is taken.

IV.   STATUS OF AMENDMENTS

No Amendment has been filed subsequent to the issuance of the Final Office Action on March 29, 2011.

V.   SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention addresses problems associated with analyzing messages which are transmitted between the individual layers of the Open Systems Interconnection (OSI) reference model. Specifically, the present invention provides a message analyzer and method for analyzing messages in which an evaluation of a characteristic feature for plural messages which are transmitted via one service access point is possible, without requiring all of the information relating to all available messages to be read in by the message analyzer.

1. A message analyzer for analyzing messages which are transmitted via at least one service access point from layers of an Open Systems Interconnection (OSI) reference model of an end system of a subscriber of a mobile telephone system, the message analyzer comprising (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

   a storage device for storing messages (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13);

   a selector for reading in a sequence of temporally successive messages (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

a display device for displaying, on a single screen, a first region and a second region (See, for

example, Specification, page 9, lines 17-20; FIG. 2, element 15, 16, and 17, and FIG. 3),

wherein the sequence of messages is read in by means of the selector from the storage device

and displayed listed in the first region (See, for example, Specification, page 9, lines 21-

31),

wherein the selector determines, for the at least one service access point, a first characteristic

feature of the messages which are transmitted via the at least one service access point and

a course of the first characteristic feature is displayed on the display device in the second

region (See, for example, Specification, page 10, line 7- page 11, line 20),

wherein the sequence of messages read in by the selector is dependent upon a selection of a

specific point of the course of the first characteristic feature that is selectable in the second

region (See, for example, Specification, page 11, lines 11-20), and

wherein the display device is configured to display a selectable marking produced

automatically by the selector in the second region based on a predefined additional item of

information stored during storage of messages in the storage device (See, for example,

Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

wherein upon selection of the marking, a sequence of messages which corresponds to the

specific point of the selected marking is read in from the storage device (See, for example,

Specification, page 15, line 30- page 16, line 18).

Independent claim 4 provides for the following:

4. A message analyzer for analyzing messages which are transmitted via at least one service

access point from layers of an Open Systems Interconnection (OSI) reference model of an end

system of a subscriber of a mobile telephone system, the message analyzer comprising (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

a storage device for storing messages (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13);

a selector for reading in a sequence of temporally successive messages (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

a display device for displaying, on a single screen, a first region and a second region (See, for example, Specification, page 9, lines 17-20; FIG. 2, element 15, 16, and 17, and FIG. 3),

wherein the sequence of messages is read in by means of the selector from the storage device and displayed in the first region (See, for example, Specification, page 9, lines 21-31),

wherein the selector determines, for the at least one service access point, a first characteristic feature of the messages which are transmitted via the at least one service access point and a course of the first characteristic feature is displayed on the display device in the second region (See, for example, Specification, page 10, line 7- page 11, line 20),

wherein the sequence of messages read in by the selector is dependent upon a selection of a specific point of the course of the first characteristic feature that is selectable in the second region (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

wherein a plurality of specific points are marked by respective markings in the course displayed in the second region and, upon selection of a marking of the markings, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4).

Independent claim 10 provides for the following:

10. A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14) and which are stored in a storage device (See, for example, Specification, page 8, lines 28-30; FIG. 2, element 13), comprising the steps of (See, for example, page 7, line 33- page 8, line 27; FIG. 2, element 10):

reading in a sequence of messages by a selector (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

displaying the sequence of messages which is read in by the selector, in tabular form in a first region of a single screen of a display device ((See, for example, Specification, page 9, lines 17-31; FIG. 2, element 15/16, and FIG. 3), wherein

a first characteristic feature of messages which are transmitted via the at least one service access point is determined by the selector (See, for example, Specification, page 10, line 7- page 11, line 20)

and a course of the first characteristic feature is displayed in a second region of the single screen of the display device (See, for example, Specification, page 10, line 7- page 11, line 20),

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature; and (See, for example, Specification, page 11, lines 11-20)

reading in, by the selector, a sequence of messages dependent upon the specific point (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), wherein:

during storage of the messages in the storage device, a predefined additional item of information is stored (See, for example, Specification, page 15, line 30- page 16, line 18), and

dependent upon the predefined additional item of information, a selectable marking is produced automatically in the second region by the selector (See, for example, Specification, page 15, line 30- page 16, line 18; FIG. 3, elements 33.1-33.4), and

upon selection of the marking, dependent upon the specific point marked by the selected marking, a corresponding sequence of messages is read in by the selector from the storage device (See, for example, Specification, page 15, line 30- page 16, line 18).

Independent claim 13 provides for the following:

13. A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device, comprising the steps of:

reading in a sequence of messages by a selector (See, for example, Specification, page 8, line 28-page 9, line 11; FIG. 2, element 14); and

displaying the sequence of messages which is read in by the selector, in tabular form in a first region of a single screen of a display device (See, for example, Specification, page 9, lines 17-20; FIG. 2, element 15, 16, and 17, and FIG. 3), wherein

a first characteristic feature of messages which are transmitted via the at least one service

access point is determined by the selector (See, for example, Specification, page 10, line 7-

page 11, line 20),

and a course of the first characteristic feature is displayed in a second region of the single

screen of the display device (See, for example, Specification, page 10, line 7- page 11, line

20),

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature

(See, for example, Specification, page 11, lines 11-20); and

reading in, by the selector, a sequence of messages dependent upon the specific point (See, for

example, Specification, page 11, lines 11-20), wherein:

in the second region, a plurality of specific points of the course of the first characteristic

feature are marked by respective markings (See, for example, Specification, page 15, line

30- page 16, line 18; FIG. 3, elements 33.1-33.4)s, and

upon selection of a marking of the markings, dependent upon the specific point marked by

the selected marking, a corresponding sequence of messages is read in by the selector from the

storage device (See, for example, Specification, page 15, line 30- page 16, line 18).

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1, 2, 4, 6 through 11, 13, 15 through 18, and 20 were rejected under 35 U.S.C.

§103(a) for obviousness predicated *Pruthi et al.* (US 2002/0105911) in view of *Bahadiroglu et al.*

(US 2002/0186660), and *Bertram et al.* (US 6,144,379).

B. Claims 19 and 21 were rejected under 35 U.S.C. §103(a) for obviousness predicated upon *Pruthi et al.* in view of *Bahadiroglu et al.*, and *Bertram et al.*, further in view of *Hilliker* (US 2002/0100422).

VII. <u>ARGUMENT</u>

GROUPING OF CLAIMS

For the convenience of the Honorable Board of Patent Appeals and Interferences ("Board"), Appellant does not separately argue the patentability of any dependent claim. Instead, the patentability of all dependent claims stands and falls with their respective independent claims, i.e., independent claims 1, 4, 10, and 13.

Since all independent claims include the same or similar distinctive features, Appellant selects independent claim 1 of the group of independent claims to argue. As such the patentability of all of the appealed claims including independent claims 4, 10, and 13 stands and falls with independent claim 1. Appellant will therefore focus on Rejection A above that includes independent claim 1.

A. CLAIMS 1, 2, 4, 6 THROUGH 11, 13, 15 THROUGH 18, AND 20 ARE NOT RENDERED OBVIOUS BY *PRUTHI ET AL.* IN VIEW OF *BAHADIROGLU ET AL.*, AND *BERTRAM ET AL..*

The Examiner bears initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision. *Gilbert & P. Hyatt v. Dudas*, 551 F.3d 1307, 1313 (Fed. Cir. 2008); *In re Glaug*, 283 F.3d 1335 (Fed. Cir. 2002*); In re Rijkaert,* 9 F.3d 1531, 1532 (Fed. Cir. 1992); *In re Oetiker,* 977 F.2d 1992*); In re Piasecki*, 745 F.2d 1468 (Fed. Cir. 1984). In rejecting a claim under 35 U.S.C. §103(a), the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ

173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425

F.2d 785, 165 USPQ 570 (CCPA 1970). Further, in rejecting a claim under 35 U.S.C. §103(a) it

is incumbent upon the Examiner to establish the requisite motivation. As maintained by the

Supreme Court of the United States in *KSR Intern. Co. v. Teleflex Inc.*, 127 S.Ct. 1727 at 1741,

an obviousness "analysis should be made explicit." See, *In re Kahn*, 441 F.3d 977, 988 (C.A. Fed.

2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements;

instead, there must be some articulated reasoning with some rational underpinning to support the

legal conclusions of obviousness"). Indeed, the Examiner is required to make specific factual

findings, not generalizations. *See M.P.E.P. §2144.08 II. A. 5.* That initial burden required by

procedural due process of law has not been discharged.

The Final Office Action (page 2) states that Bertram teaches the limitations of "the

sequence of messages read in by the selector is dependent upon a selection of a specific point of

the course of the first characteristic feature that is selectable in the second region," "the display

device is configured to display a selectable marking produced automatically by the selector in the

second region based on a predefined additional item of information stored during storage of

messages in the storage device," and "upon selection of the marking, a sequence of messages

which corresponds to the specific point of the selected marking is read in from the storage

device," because:

> Bertram teaches CPU provide obtains or fetches various parameters including
> memory I/O parameter in associated with % storage capacity, which is stored in
> database (Fig. 4, col 4 lines 12-32, col 5 lines 19-29, 41-49, col 6 lines 35-50).
> The first characteristic feature is the line graph indicating % storage capacity on
> pop up window 101. Furthermore, Bertram also teaches display screen displays,
> clickable icons produced automatically by system, e.g., CPU, on the line graph of
> % storage capacity change over a 12 hour periods to show line graph of memory
> I/O parameter, which is store in memory and, by clicking the icon, memory I/O
> parameter in associated with % storage capacity at corresponding time , e.g., 3PM,
> which is stored in a database (Fig. 4, col 4 lines 12-32, col 5 lines 19-24, col 6 lines

16-50). Meaning, displaying clickable icon produced automatically by system in the popup display based on memory I/O parameter in associated with % storage capacity at 3PM, which is stored in a database is equivalent to displaying the marking produced automatically by the selector in the second region based on a predefined addition item of information stored during storage of messages in the storage device.

Further, the Advisory Action states:

> In order to calculate "%" storage capacity at the specific time on the graph, sequence of I/O parameters, e.g., sequence of message, between n time (or current) and n-1 (or previous) time is gathered so as to provide % storage capacity at the n time, e.g., specific point by calculation. As shown in Fig. 4, % storage capacity, which is result of calculation of sequence of I/O parameters, is shown as clickable icon over a time parameter along the X axis.

As best understood, the Office Action equates the distribution parameter shown in the first display with a sequence of messages, the line graph of % storage capacity for a single server with a course of a first characteristic feature, the markings at each hour with automatically produced markings based on an additional item of information stored during storage of messages in the storage device, and selection of the marking as displaying a sequence of messages read in from storage corresponding to the selected point. However, the first display does not display a "sequence of messages;" it is a snapshot of averaged values of data. Claim 1, for example, recites "a sequence of temporally successive messages," which is a succession of messages over time, not a snapshot at a given time. There is no sequence of messages being read in by the selector and displayed; the data from the database is averaged, and the averaged values are displayed. Further, the line graph is not a display of a course of a first characteristic feature; it is merely an expansion of a point from the first display. Even assuming, *arguendo*, that the line graph is a display of a course of a first characteristic feature, the selectable markings on the line graph are not based on a second characteristic feature stored in the database. The markings are based on a clock; they are every hour. At best, a second characteristic feature (that which is displayed after selecting the

marking) is based on the markings (the time), but the markings are not based on the second characteristic feature. Selection of a particular time brings up other data that applies to that particular time, but not another sequence of messages. Clearly, if all of the data relates to a single time, it cannot be a sequence, or temporal succession, of messages.

The Final Office Action (pages 3-4) and Advisory Action further disagree that the motivation for combining *Bertram* with *Pruthi* and *Bahadiroglu* fails to result in the claimed limitations, and essentially repeats portions of the rejection. However, *Bertram*'s goal of providing less cluttered graphical display access to communication networks (i.e., the motivation cited in the Office Action for combining *Bertram* with *Pruthi* and *Bahadiroglu*) is accomplished in a different way than that claimed. Specifically, the claimed method begins with a sequence of all messages, displays a portion of those messages (those corresponding to a first characteristic), and then a third display shows messages having a second characteristic and corresponding to a point in the second display. As discussed *supra*, *Bertram* does not begin with a sequence of messages, but rather begins with an average of stored data. Thus, the first display is already a reduced display, in contrast with the claimed first display. The second display is an expansion of one point from the first display, rather than a portion of the first display corresponding to a first characteristic or a reduction from the first display. Then, the third display is yet different data, rather than a sequence of messages that correspond to a second characteristic.

Based on the foregoing, it is apparent that, *Bahadiroglu* and *Bertram* neither disclose nor suggest the features of the claimed invention that are admittedly missing from the primary reference to *Pruthi*. Therefore, even if, for the sake of argument, the applied references are combined as proposed by the Examiner, and Appellant does not agree that the requisite basis for

the asserted motivation has been established, the invention defined in independent claim 1 would

not result.

B.   CLAIMS 19 AND 21 ARE NOT RENDERED OBVIOUS BY *PRUTHI ET AL.* IN VIEW OF *BAHADIROGLU ET AL.*, *BERTRAM ET AL.* AND *HILLIKER.*

As *Hilliker* fails to cure the deficiencies of *Pruthi et al.*, *Bahadiroglu et al.*, and *Bertram*

et al., for the reasons stated *supra* with regard to the rejection of claim 1, claims 19 and 21 are not

rendered obvious.

VIII. CONCLUSION AND PRAYER FOR RELIEF

Based on the foregoing, it is apparent that none of the Examiner's rejections under 35 U.S.C. §§ 103(a) is factually or legally viable. Appellant therefore solicits the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

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IX. CLAIMS APPENDIX

1. A message analyzer for analyzing messages which are transmitted via at least one service access point from layers of an Open Systems Interconnection (OSI) reference model of an end system of a subscriber of a mobile telephone system, the message analyzer comprising:

a storage device for storing messages;

a selector for reading in a sequence of temporally successive messages; and

a display device for displaying, on a single screen, a first region and a second region,

wherein the sequence of messages is read in by means of the selector from the storage device and displayed in the first region,

wherein the selector determines, for the at least one service access point, a first characteristic feature of the messages which are transmitted via the at least one service access point and a course of the first characteristic feature is displayed on the display device in the second region,

wherein the sequence of messages read in by the selector is dependent upon a selection of a specific point of the course of the first characteristic feature that is selectable in the second region, and

wherein the display device is configured to display a selectable marking produced automatically by the selector in the second region based on a predefined additional item of information stored during storage of messages in the storage device, and

wherein upon selection of the marking, a sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device.

2. A message analyzer according to claim 1, wherein:

the selector determines a second characteristic feature for messages which are transmitted via

a plurality of service access points of a layer of the OSI reference model, the a course of

the second characteristic feature is displayed on the display device in the second region.

3. (Canceled)

4. A message analyzer for analyzing messages which are transmitted via at least one service

access point from layers of an Open Systems Interconnection (OSI) reference model of an end

system of a subscriber of a mobile telephone system, the message analyzer comprising:

a storage device for storing messages;

a selector for reading in a sequence of temporally successive messages; and

a display device for displaying, on a single screen, a first region and a second region,

wherein the sequence of messages is read in by means of the selector from the storage device

and displayed in the first region,

wherein the selector determines, for the at least one service access point, a first characteristic

feature of the messages which are transmitted via the at least one service access point and

a course of the first characteristic feature is displayed on the display device in the second

region,

wherein the sequence of messages read in by the selector is dependent upon a selection of a

specific point of the course of the first characteristic feature that is selectable in the second

region, and

wherein a plurality of specific points are marked by respective markings in the course

displayed in the second region and, upon selection of a marking of the markings, a

sequence of messages which corresponds to the specific point of the selected marking is read in from the storage device.

5. (Canceled)

6. A message analyzer according to claim 1, wherein:

the course of the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is a time axis.

7. A message analyzer according to claim 6, wherein:

a third region of the course displayed in the second region which corresponds respectively to the sequence of messages currently displayed in the first region, is highlighted.

8. A message analyzer according to claim 1, wherein:

the course of the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is subdivided into intervals each having an identical number of messages.

9. A message analyzer according to claim 1, wherein:

the first characteristic feature is a number of transmitted messages per interval of time or a data load of a layer of the OSI reference model or a number of messages transmitted repeatedly.

10. A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device, comprising the steps of:

reading in a sequence of messages by a selector; and

displaying the sequence of messages which is read in by the selector, in tabular form in a first

region of a single screen of a display device, wherein

a first characteristic feature of messages which are transmitted via the at least one service

access point is determined by the selector

and a course of the first characteristic feature is displayed in a second region of the single

screen of the display device,

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature;

and

reading in, by the selector, a sequence of messages dependent upon the specific point, wherein:

during storage of the messages in the storage device, a predefined additional item of

information is stored, and

dependent upon the predefined additional item of information, a selectable marking is

produced automatically in the second region by the selector, and

upon selection of the marking, dependent upon the specific point marked by the selected

marking, a corresponding sequence of messages is read in by the selector from the storage

device.

11. A method according to claim 10, further comprising:

determining, by the selector, a second characteristic feature of messages which are transmitted

via a plurality of service access points of a layer of the OSI reference model.

12. (Canceled)

13. A method using a computer or a digital signal processor for analyzing messages which are transmitted via at least one service access point from layers of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device, comprising the steps of:

reading in a sequence of messages by a selector; and

displaying the sequence of messages which is read in by the selector, in tabular form in a first region of a single screen of a display device, wherein

a first characteristic feature of messages which are transmitted via the at least one service access point is determined by the selector

and a course of the first characteristic feature is displayed in a second region of the single screen of the display device,

further comprising:

selecting, in the second region, a specific point of the course of the first characteristic feature; and

reading in, by the selector, a sequence of messages dependent upon the specific point, wherein:

in the second region, a plurality of specific points of the course of the first characteristic feature are marked by respective markings, and

upon selection of a marking of the markings, dependent upon the specific point marked by the selected marking, a corresponding sequence of messages is read in by the selector from the storage device.

14. (Canceled)

15. A method according to claim 10, wherein:

at least one characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is a time axis.

16. A method according to claim 15, wherein:

a third region which corresponds respectively to the sequence of messages displayed in tabular form in the first region is displayed highlighted in the second region.

17. A method according to claim 10, wherein:

the first characteristic feature is displayed in the second region in a coordinate system, wherein the X axis of the coordinate system is sub-divided into intervals each having an identical number of messages.

18. A message analyzer according to claim 1, wherein the predefined additional item of information is defined as a specific event that occurs during a test run.

19. A message analyzer according to claim 18, wherein the specific event is a change of attenuation.

20. A method according to claim 10, wherein the predefined additional item of information is defined as a specific event that occurs during a test run.

21. A method according to claim 20, wherein the specific event is a change of attenuation.

X.   <u>EVIDENCE APPENDIX</u>

Appellant is unaware of any evidence that is required to be submitted in the present Evidence

Appendix.

XI. <u>RELATED PROCEEDINGS APPENDIX</u>

Appellant is unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.